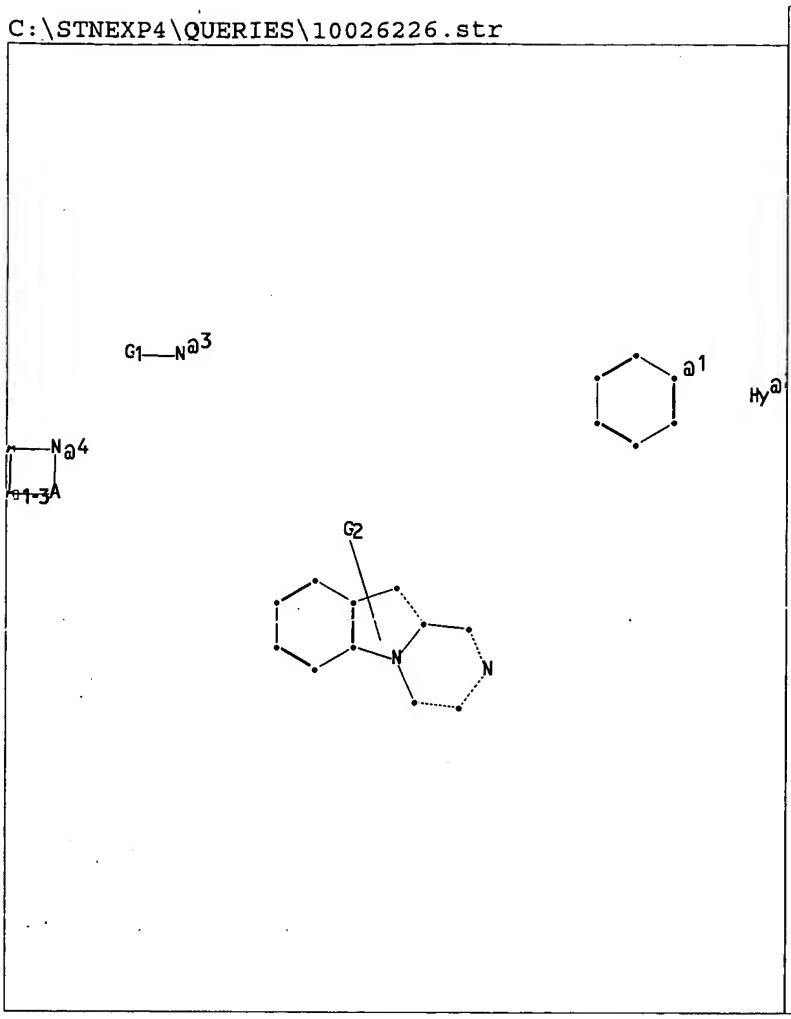
L Number	Hits	Search Text	DB	Time stamp
1	811	((544/344) or (514/250)).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/05/21 18:18

C:\STNEXP4\QUERIES\10026226.str



chain nodes :
14 21 26 36
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 15 16 17 18 19 20 27 28 29 30
chain bonds :
14-26
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 8-10 9-13 10-11 11-12 12-13 15-16
15-20 16-17 17-18 18-19 19-20 27-28 27-30 28-29 29-30
exact/norm bonds :
6-9 7-8 8-9 8-10 9-13 10-11 11-12 12-13 14-26 27-28 27-30 28-29 29-30
exact bonds :
5-7
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 15-16 15-20 16-17 17-18 18-19 19-20
isolated ring systems :
containing 1 :

G1:[*1],[*2]

G2:[*3],[*1],[*2],[*4]

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:CLASS 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom
26:CLASS 27:Atom 28:Atom 29:Atom 30:Atom 36:CLASS 37:CLASS
Generic attributes :
21:
Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : less than 2

Type of Ring System : Monocyclic

Element Count :
Node 21: Limited
C,C5
N,N1
O,O0
S,S0

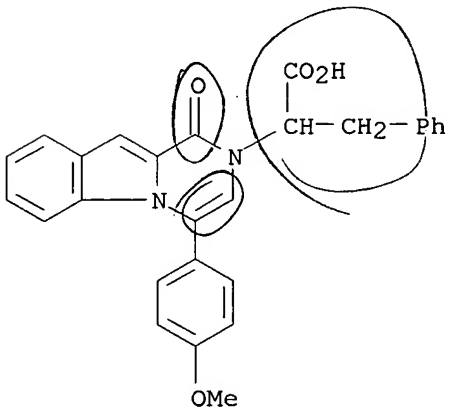
```
=>
Uploading 10026226.str

L1      STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> s l1 sss sam
SAMPLE SEARCH INITIATED 17:46:20 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   3571 TO ITERATE

 28.0% PROCESSED    1000 ITERATIONS                                 1 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        67838 TO    75002
PROJECTED ANSWERS:               1 TO      184

L2            1 SEA SSS SAM L1

=> s l1 sss ful
FULL SEARCH INITIATED 17:46:50 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -  71944 TO ITERATE

100.0% PROCESSED   71944 ITERATIONS                               102 ANSWERS
SEARCH TIME: 00.00.02

L3          102 SEA SSS FUL L1

=> s l3
L4          26 L3

=> d l4 1-26 bib,ab,hitstr
```

L4 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 2000:278022 CAPLUS
DN 132:308359
TI aminoketone solid support templates useful for solid phase synthesis of imidazoles, benzodiazepines, pyrazines, steroid mimics, etc.
IN Mjalli, Adnan M. M.
PA Advanced Syntech, Llc, USA
SO PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000023487	A1	20000427	WO 1999-US23619	19991008
	W: CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 6117940	A	20000912	US 1998-174521	19981016
	EP 1153050	A1	20011114	EP 1999-951902	19991008
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	US 1998-174521	A	19981016		
	US 1997-61927P	P	19971017		
	WO 1999-US23619	W	19991008		

AB A solid phase reaction component for prodn. of a chem. compd. in a reaction medium comprises an aminoketone core compd. linked to a polymer substrate, said substrate being insol. in said reaction medium, e.g. PXLNH(CR1R2)nCOR3 [n = 1, 2; X = covalent bond-forming moiety; L = multifunctional monomer; L, R1-R3 = (substituted) alkyl, alkylaryl, alkenyl, alkenylaryl; P = polymer]. Thus, aminoketone resin I was used to prep. 2-(3-benzyl-2-oxo-5-phenyl-2H-pyrazin-1-yl)-N-hydroxypropionamide and N-hydroxy-2-(5-oxo-2-phenyl-1,5-dihydrobenzo[e][1,4]diazepin-4-yl)propionamide.

IT **265315-37-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(aminoketone solid support templates useful for solid phase synthesis of imidazoles, benzodiazepines, pyrazines, and steroid mimics)
RN 265315-37-5 CAPLUS
CN Pyrazino[1,2-a]indole-2(1H)-acetic acid, 4-(4-methoxyphenyl)-1-oxo-.alpha.-(phenylmethyl)- (9CI) (CA INDEX NAME)



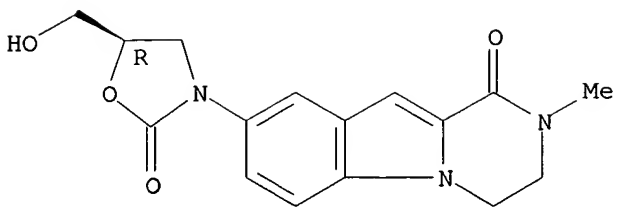
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

L4 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1999:487536 CAPLUS
DN 131:129985
TI Oxazolidines substituted by tricyclic indoles
IN Ruppelt, Martin; Bartel, Stephan; Guarnieri, Walter; Raddatz, Siegfried; Rosentreter, Ulrich; Wild, Hanno; Endermann, Rainer; Kroll, Hein-Peter
PA Bayer A.-G., Germany
SO Ger. Offen., 40 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19802235	A1	19990729	DE 1998-19802235	19980122
	WO 9937652	A1	19990729	WO 1999-EP97	19990109
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9924206	A1	19990809	AU 1999-24206	19990109
	EP 1049701	A1	20001108	EP 1999-903616	19990109
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002501073	T2	20020115	JP 2000-528573	19990109
PRAI	DE 1998-19802235	A	19980122		
	WO 1999-EP97	W	19990109		

OS MARPAT 131:129985
AB Approx. 25 antibacterial title compds. such as I (R = benzyl, p-methoxybenzyl, allyl, Bu, cyclohexyl, Et, Me; R1 = Ac, EtCO, CO2Me) were prepd. E.g., N-[3-(2-(ethoxycarbonyl)-5-indolylamino)-2-hydroxypropyl]acetamide was cyclized with carbonyldiimidazole to give 85% 3-(2-ethoxycarbonyl-5-indolyl)-5-(acetaminomethyl)-2-oxazolidinone. The MIC of I (R = Bu, R1 = Ac) was 4 .mu.g/mL against Staphylococcus Aureus.
IT **234770-30-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and bactericidal activity of oxazolidines substituted by tricyclic indoles)
RN 234770-30-0 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 3,4-dihydro-8-[(5R)-5-(hydroxymethyl)-2-oxo-3-oxazolidinyl]-2-methyl- (9CI) (CA INDEX NAME)

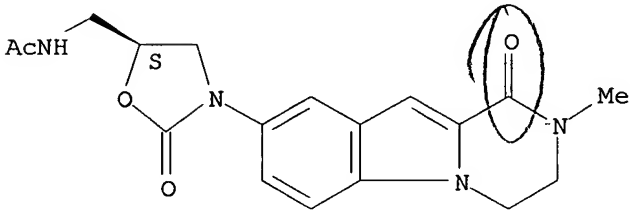
Absolute stereochemistry.



IT **234770-35-5P 234770-37-7P 234770-38-8P**
234770-39-9P 234770-40-2P 234770-42-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and bactericidal activity of oxazolidines substituted by tricyclic indoles)

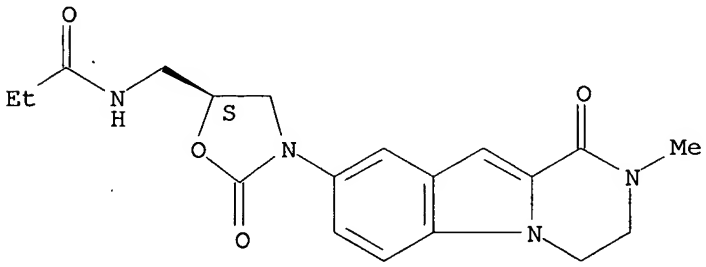
RN 234770-35-5 CAPLUS
CN Acetamide, N-[[(5S)-2-oxo-3-(1,2,3,4-tetrahydro-2-methyl-1-oxopyrazino[1,2-a]indol-8-yl)-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



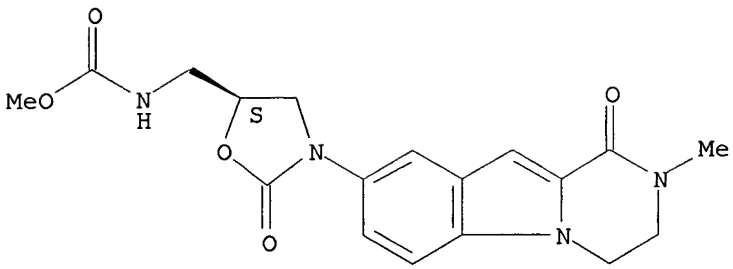
RN 234770-37-7 CAPLUS
CN Propanamide, N-[[(5S)-2-oxo-3-(1,2,3,4-tetrahydro-2-methyl-1-oxopyrazino[1,2-a]indol-8-yl)-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



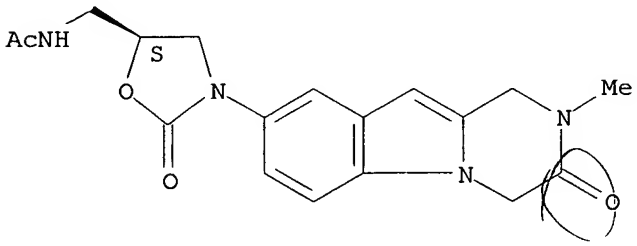
RN 234770-38-8 CAPLUS
CN Carbamic acid, [[(5S)-2-oxo-3-(1,2,3,4-tetrahydro-2-methyl-1-oxopyrazino[1,2-a]indol-8-yl)-5-oxazolidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



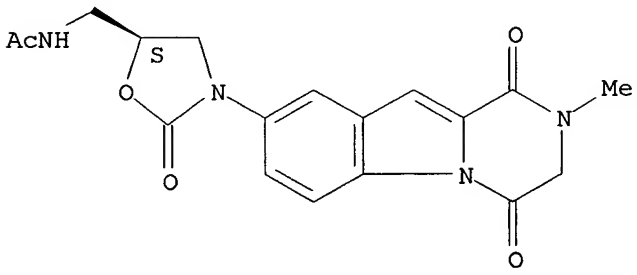
RN 234770-39-9 CAPLUS
CN Acetamide, N-[[(5S)-2-oxo-3-(1,2,3,4-tetrahydro-2-methyl-3-oxopyrazino[1,2-a]indol-8-yl)-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



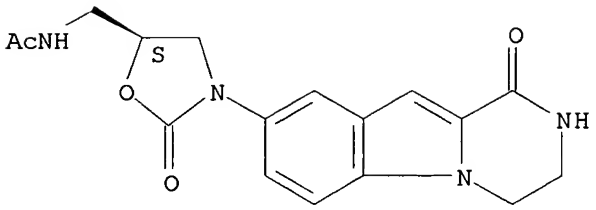
RN 234770-40-2 CAPLUS
CN Acetamide, N-[[(5S)-2-oxo-3-(1,2,3,4-tetrahydro-2-methyl-1,4-dioxopyrazino[1,2-a]indol-8-yl)-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 234770-42-4 CAPLUS
CN Acetamide, N-[[(5S)-2-oxo-3-(1,2,3,4-tetrahydro-1-oxopyrazino[1,2-a]indol-8-yl)-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

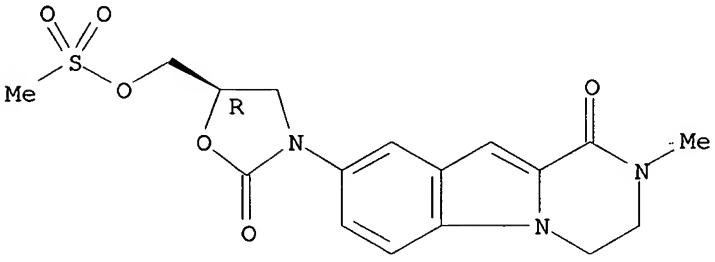
Absolute stereochemistry.



IT **234770-31-1P 234770-32-2P 234770-33-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and bactericidal activity of oxazolidines substituted by tricyclic indoles)

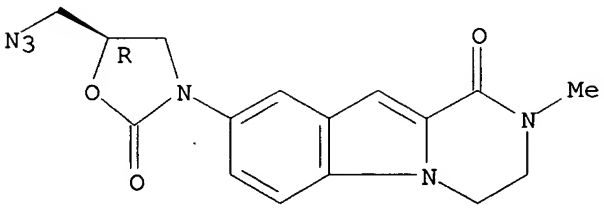
RN 234770-31-1 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 3,4-dihydro-2-methyl-8-[(5R)-5-[[(methylsulfonyl)oxy]methyl]-2-oxo-3-oxazolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



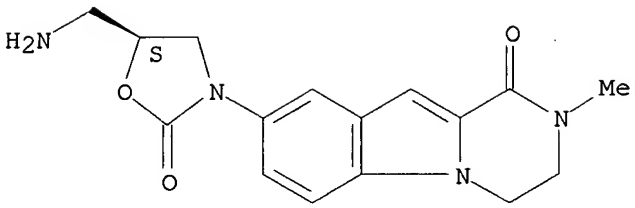
RN 234770-32-2 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-[(5R)-5-(azidomethyl)-2-oxo-3-oxazolidinyl]-3,4-dihydro-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 234770-33-3 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-[(5S)-5-(aminomethyl)-2-oxo-3-oxazolidinyl]-3,4-dihydro-2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

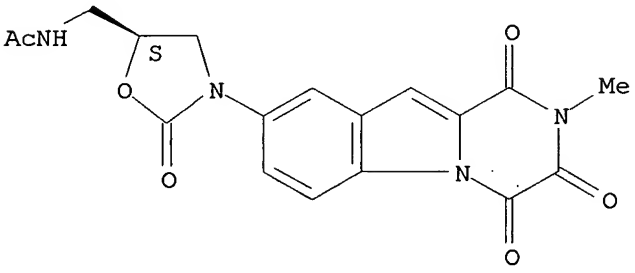
Absolute stereochemistry.



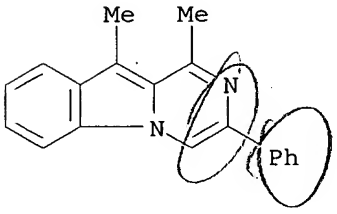
●x HCl

IT **234770-41-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and bactericidal activity of oxazolidines substituted by tricyclic indoles)
RN 234770-41-3 CAPLUS
CN Acetamide, N-[[(5S)-2-oxo-3-(1,2,3,4-tetrahydro-2-methyl-1,3,4-trioxopyrazino[1,2-a]indol-8-yl)-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

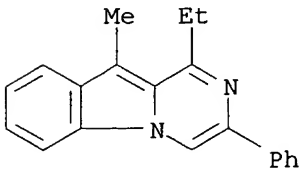


L4 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1995:332659 CAPLUS
DN 122:290796
TI Synthesis and some reactions of indolo[2,1-c]-1,4-oxazinium perchlorates
AU Kibalny, A. V.; Nikolyukin, Yu. A.; Dulenko, V. I.
CS Inst. Fiz.-Org. Khim. Uglekhim., NAN Ukr., Donetsk, 340114, Ukraine
SO Khimiya Geterotsiklicheskikh Soedinenii (1994), (8), 1041-7
CODEN: KGSSAQ; ISSN: 0132-6244
PB Latviiskii Institut Organicheskogo Sinteza
DT Journal
LA Russian
AB Title compds. I (R = Me, Et, Pr, CHMe2, CMe3, Ph) were prepd. by reaction of 1-phenacylskatole with RCO+ClO4-. I were converted to pyrazine analogs (II; R = alkyl), dimeric compds. (III; R1 = H, Me), and indolotriazepine IV.
IT **163158-88-1P 163158-89-2P 163158-90-5P**
163158-91-6P 163158-92-7P 163158-96-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 163158-88-1 CAPLUS
CN Pyrazino[1,2-a]indole, 1,10-dimethyl-3-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



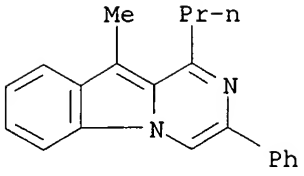
● HCl

RN 163158-89-2 CAPLUS
CN Pyrazino[1,2-a]indole, 1-ethyl-10-methyl-3-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

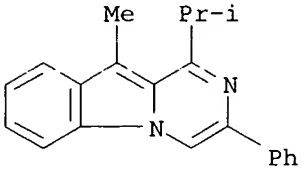


● HCl

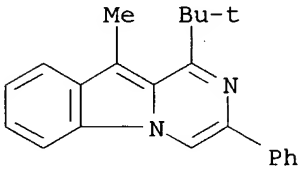
RN 163158-90-5 CAPLUS
CN Pyrazino[1,2-a]indole, 10-methyl-3-phenyl-1-propyl- (9CI) (CA INDEX NAME)



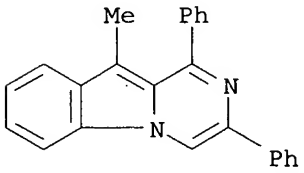
RN 163158-91-6 CAPLUS
CN Pyrazino[1,2-a]indole, 10-methyl-1-(1-methylethyl)-3-phenyl- (9CI) (CA INDEX NAME)



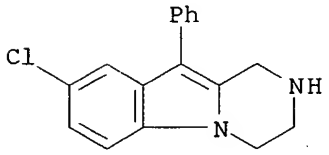
RN 163158-92-7 CAPLUS
CN Pyrazino[1,2-a]indole, 1-(1,1-dimethylethyl)-10-methyl-3-phenyl- (9CI) (CA INDEX NAME)



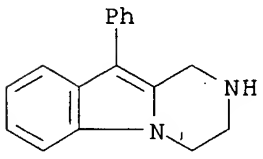
RN 163158-96-1 CAPLUS
CN Pyrazino[1,2-a]indole, 10-methyl-1,3-diphenyl- (9CI) (CA INDEX NAME)



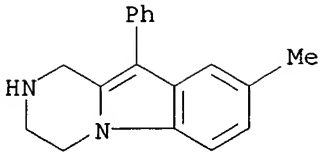
L4 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1992:59321 CAPLUS
DN 116:59321
TI Synthesis of 10-phenyl-1,2,3,4-tetrahydropyrazino[1,2-a]indoles and ethyl 1-(2-aminoethyl)-3-phenylindole-2-carboxylates
AU Basanagoudar, L. D.; Mahajanshetti, C. S.; Hendi, S. B.; Dambal, S. B.
CS Dep. Chem., Karnatak Univ., Dharwad, 580 003, India
SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1991), 30B(11), 1014-17
CODEN: IJSBDB; ISSN: 0376-4699
DT Journal
LA English
AB Cyanomethylation of 3-phenylindole-2-carboxylates I (R = H, Me, OMe, OEt, Br, Cl, R1 = H; R = H, R1 = Cl, Me; R = R1 = Me; R2 = H, R3 = Et) with ClCH2CN in the presence of NaH in DMF gave the corresponding 2-cyanoethyl derivs. I (R2 = CH2CN) (II). Reductive cyclization of II with LiAlH4 gave directly 10-phenyl-1,2,3,4-tetrahydropyrazino[1,2-a]indoles III. Catalytic hydrogenation of II gave 2-aminoethyl derivs. I (R2 = CH2CH2NH2) (IV), while hydrolysis gave 2-carboxy-3-phenylindolecarboxylates I (R2 = CH2CO2H, R3 = H). III and IV were screened for antiserotonin and antihistamine activities. Some compds. exhibit pronounced activities.
IT **39626-24-9P 52839-15-3P 138653-65-3P**
138653-66-4P 138653-67-5P 138653-68-6P
138653-69-7P 138653-70-0P 138653-71-1P
138654-02-1P 138654-03-2P 138654-04-3P
138654-05-4P 138654-06-5P 138654-07-6P
138654-08-7P 138654-09-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 39626-24-9 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)



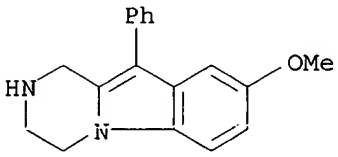
RN 52839-15-3 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)



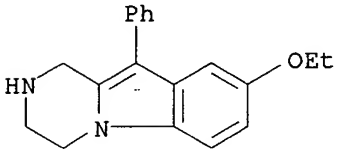
RN 138653-65-3 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-8-methyl-10-phenyl- (9CI) (CA INDEX NAME)



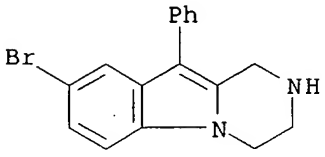
RN 138653-66-4 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-8-methoxy-10-phenyl- (9CI) (CA INDEX NAME)



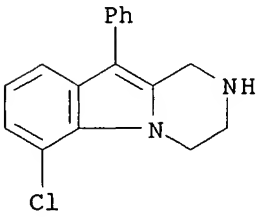
RN 138653-67-5 CAPLUS
CN Pyrazino[1,2-a]indole, 8-ethoxy-1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)



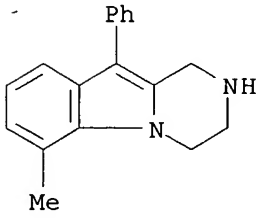
RN 138653-68-6 CAPLUS
CN Pyrazino[1,2-a]indole, 8-bromo-1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)



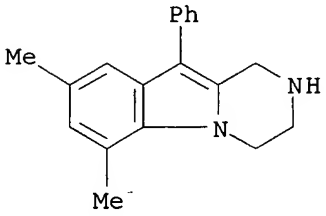
RN 138653-69-7 CAPLUS
CN Pyrazino[1,2-a]indole, 6-chloro-1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)



RN 138653-70-0 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-6-methyl-10-phenyl- (9CI) (CA INDEX NAME)



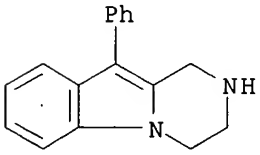
RN 138653-71-1 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-6,8-dimethyl-10-phenyl- (9CI) (CA INDEX NAME)



RN 138654-02-1 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

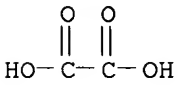
CM 1

CRN 52839-15-3
CMF C17 H16 N2



CM 2

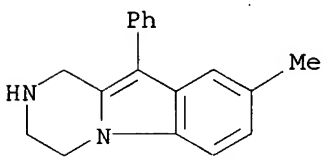
CRN 144-62-7
CMF C2 H2 O4



RN 138654-03-2 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-8-methyl-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

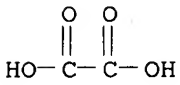
CM 1

CRN 138653-65-3
CMF C18 H18 N2



CM 2

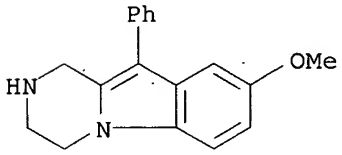
CRN 144-62-7
CMF C2 H2 O4



RN 138654-04-3 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-8-methoxy-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

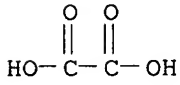
CM 1

CRN 138653-66-4
CMF C18 H18 N2 O



CM 2

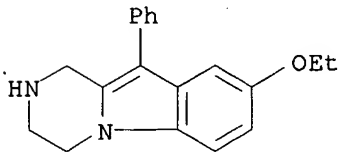
CRN 144-62-7
CMF C2 H2 O4



RN 138654-05-4 CAPLUS
CN Pyrazino[1,2-a]indole, 8-ethoxy-1,2,3,4-tetrahydro-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

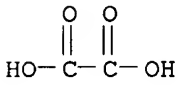
CM 1

CRN 138653-67-5
CMF C19 H20 N2 O



CM 2

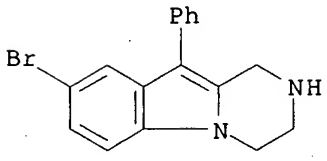
CRN 144-62-7
CMF C2 H2 O4



RN 138654-06-5 CAPLUS
CN Pyrazino[1,2-a]indole, 8-bromo-1,2,3,4-tetrahydro-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

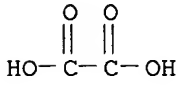
CM 1

CRN 138653-68-6
CMF C17 H15 Br N2



CM 2

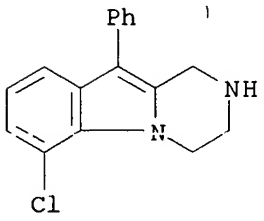
CRN 144-62-7
CMF C2 H2 O4



RN 138654-07-6 CAPLUS
CN Pyrazino[1,2-a]indole, 6-chloro-1,2,3,4-tetrahydro-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

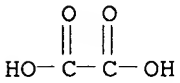
CM 1

CRN 138653-69-7
CMF C17 H15 Cl N2



CM 2

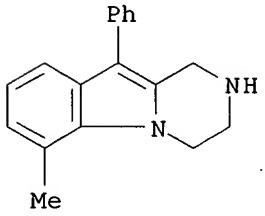
CRN 144-62-7
CMF C2 H2 O4



RN 138654-08-7 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-6-methyl-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

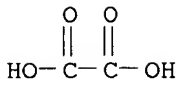
CM 1

CRN 138653-70-0
CMF C18 H18 N2



CM 2

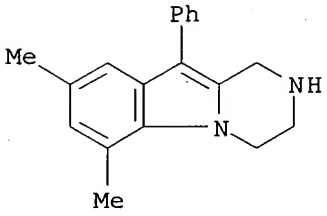
CRN 144-62-7
CMF C2 H2 O4



RN 138654-09-8 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-6,8-dimethyl-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

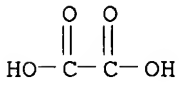
CM 1

CRN 138653-71-1
CMF C19 H20 N2

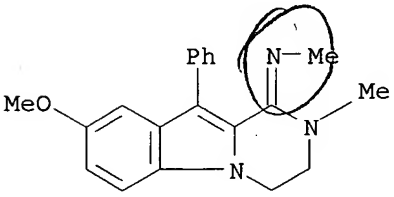


CM 2

CRN 144-62-7
CMF C2 H2 O4



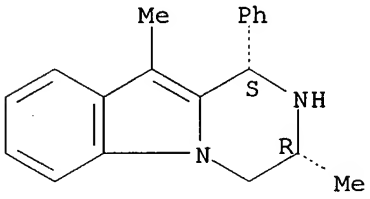
L4 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1989:497180 CAPLUS
DN 111:97180
TI Synthesis of incazane tricyclic analogs
AU Glushkov, R. G.; Zaitsev, S. A.; Mashkovskii, M. D.; Andreeva, N. I.
CS USSR
SO Khimiko-Farmatsevticheskii Zhurnal (1988), 22(9), 1060-3
CODEN: KHFZAN; ISSN: 0023-1134
DT Journal
LA Russian
OS CASREACT 111:97180
AB Tricyclic analogs I (R = H, MeO; R1 = H, Me, Ph; R2 = Me, CH2Ph) of incazane (II) were prepd. to establish the origin of antidepressant activity in II. The carboline ring is required for this activity.
IT **122125-60-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 122125-60-4 CAPLUS
CN Methanamine, N-(3,4-dihydro-8-methoxy-2-methyl-10-phenylpyrazino[1,2-a]indol-1(2H)-ylidene)-, monohydrochloride (9CI) (CA INDEX NAME)



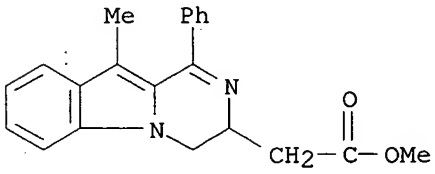
● HCl

L4 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1986:572406 CAPLUS
DN 105:172406
TI Pd(CH3CN)4(BF4)2-assisted attack of nitriles on olefins. A palladium analog of the Ritter reaction
AU Hegedus, Louis S.; Mulhern, Thomas A.; Asada, Hideki
CS Dep. Chem., Colorado State Univ., Fort Collins, CO, 80523, USA
SO Journal of the American Chemical Society (1986), 108(20), 6224-8
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
OS CASREACT 105:172406
AB The strongly electrophilic complex Pd(CH3CN)4(BF4)2 (I) activates a variety of olefins to undergo nucleophilic attack by nitriles to give nitrilium salts. These nitrilium salts undergo reaction with a variety of nucleophiles including electron-rich aroms., alcs., and amines, ultimately producing a variety of heterocyclic ring systems. E.g., N-allylskatole (II) was treated with RCN (R = Me, Et, Ph) in the presence of I followed by redn. with NaBH4 in EtOH to give 37-58% pyrazino[1,2-a]indoles III.
IT **103693-66-9P 103710-63-0P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and spectra of)
RN 103693-66-9 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-3,10-dimethyl-1-phenyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 103710-63-0 CAPLUS
CN Pyrazino[1,2-a]indole-3-acetic acid, 3,4-dihydro-10-methyl-1-phenyl-, methyl ester (9CI) (CA INDEX NAME)



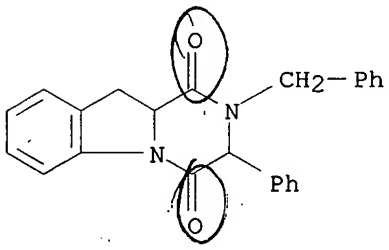
L4 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1986:533746 CAPLUS
DN 105:133746
TI 2S-and 2R-indolinecarboxylic acids
IN Roloff, Achim; Gschwend, Heinz Werner
PA Ciba-Geigy A.-G. , Switz.
SO Eur. Pat. Appl., 23 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 180544	A1	19860507	EP 1985-810480	19851021
	EP 180544	B1	19880615		
	R: CH, DE, FR, GB, IT, LI, NL				
	US 4595766	A	19860617	US 1984-664916	19841026
	JP 61103870	A2	19860522	JP 1985-237771	19851025
	US 4697016	A	19870929	US 1986-829336	19860214
PRAI	US 1984-664916		19841026		

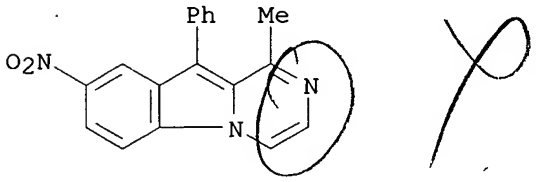
AB The title compds. [2S- and 2R-I] were prepd. as pharmaceutical intermediates. Thus, MeCOCOCl was cyclocondensed with (S)-proline anilide to give pyrrolopyrazinedione (S)-II. This was photocyclized in BuOH to give cyclodipeptide (S,S)-III. The latter was hydrolyzed in 6 M HCl to give (S)-I.

IT **104261-89-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and hydrolysis of)

RN 104261-89-4 CAPLUS
CN Pyrazino[1,2-a]indole-1,4-dione, 2,3,10,10a-tetrahydro-3-phenyl-2-(phenylmethyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1984:423433 CAPLUS
DN 101:23433
TI Synthesis and psychotropic activity of tricyclic analogs of pyrazidole
AU Grinev, A. N.; Shvedov, V. I.; Krichevskii, E. S.; Romanova, O. B.; Altukhova, L. B.; Kurilo, G. N.; Andreeva, N. I.; Golovina, S. M.; Mashkovskii, M. D.
CS Vses. Nauchno-Issled. Khim.-Farm. Inst., USSR
SO Khimiko-Farmatsevticheskii Zhurnal (1984), 18(2), 159-63
CODEN: KHFZAN; ISSN: 0023-1134
DT Journal
LA Russian
OS CASREACT 101:23433
AB RCOC(CH2R1):NNHC6H4R2-p (R = R2 = Me, R1 = Me, Et; R = Pr, R1 = Me, R2 = H, Me, MeO, Cl; R = Me, R1 = Ph, R2 = NO2), prepd. in 38.9-60.8% yields by condensation of RCOCH2CH2R1 with HCO2Et followed by coupling with p-R2C6H4N2+Cl-, were cyclized by acid to give 44.5-60% I (R3 = H) which were substituted by BrCH2CH(OBu)2 to give intermediates I [R3 = (BuO)2CHCH2]. The latter were cyclized by NH4OAc-AcOH to give 54.3-66.6% II which were hydrogenated 3-4 h at 50.degree. and 70 atm over Raney Ni to give 84.5-91.2% III (R = R2 = Me, R1 = Me, Et; R = Pr, R1 = Me, R2 = H, Me). III (R = R2 = Me, R1 = Me, Et) were effective antidepressants as shown by their 50% redn. of reserpine-induced ptosis in mice at 20-25 mg/kg.
IT **90237-31-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 90237-31-3 CAPLUS
CN Pyrazino[1,2-a]indole, 1-methyl-8-nitro-10-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

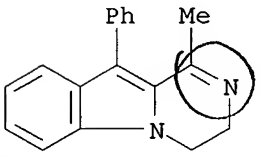


● HCl

L4 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1981:462127 CAPLUS
DN 95:62127
TI Synthesis of 10-phenyl-3,4-dihydropyrazino[1,2-a]indoles and 3-phenylindole-1-acetic acids
AU Hendi, Shivakumar B.; Basanagoudar, L. D.
CS Dep. Chem., Karnatak Univ., Dharwad, 580 003, India
SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1981), 20B(4), 285-7
CODEN: IJSBDB; ISSN: 0376-4699
DT Journal
LA English
AB 3-Phenylindole-1-acetonitriles I (R = CH2CN; R1 = H, Me, MeO, EtO, Cl) were prepd. by a new method in which appropriate N-phenylglycinonitriles are condensed with phenacyl bromide and then the condensed products are cyclodehydrated with P2O5 in boiling xylene. Catalytic hydrogenation of the nitriles gives I (R = CH2CH2NH2), which are converted into corresponding amides I (R = CH2CH2NHAc, CH2CH2NHBz) by treatment with Ac2O or BzCl; cyclodehydration with POCl3 gives the dihydropyrazinoindoles II. I (R = CH2CN) on hydrolysis afford the corresponding indole-1-acetic acids. The structures of the compds. were confirmed on the basis of IR and NMR data. I and II had antiserotonin activity (no data).
IT **78367-09-6P 78367-11-0P 78367-13-2P**
78367-15-4P 78367-17-6P 78367-18-7P
78367-20-1P 78367-21-2P 78367-22-3P
78367-23-4P 78367-24-5P 78367-25-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 78367-09-6 CAPLUS
CN Pyrazino[1,2-a]indole, 3,4-dihydro-1-methyl-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

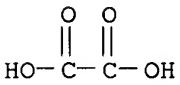
CM 1

CRN 78367-08-5
CMF C18 H16 N2



CM 2

CRN 144-62-7
CMF C2 H2 O4

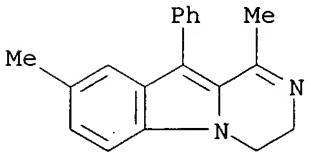


RN 78367-11-0 CAPLUS

CN Pyrazino[1,2-a]indole, 3,4-dihydro-1,8-dimethyl-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

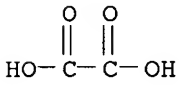
CM 1

CRN 78367-10-9
CMF C19 H18 N2



CM 2

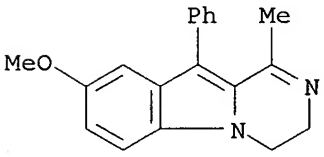
CRN 144-62-7
CMF C2 H2 O4



RN 78367-13-2 CAPLUS
CN Pyrazino[1,2-a]indole, 3,4-dihydro-8-methoxy-1-methyl-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

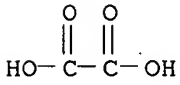
CM 1

CRN 78367-12-1
CMF C19 H18 N2 O



CM 2

CRN 144-62-7
CMF C2 H2 O4

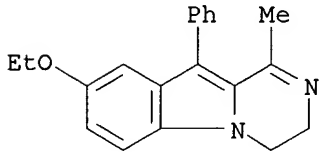


RN 78367-15-4 CAPLUS

CN Pyrazino[1,2-a]indole, 8-ethoxy-3,4-dihydro-1-methyl-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

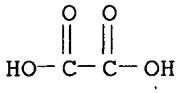
CM 1

CRN 78367-14-3
CMF C20 H20 N2 O



CM 2

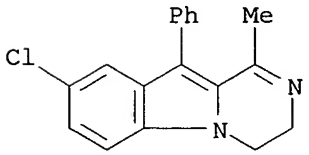
CRN 144-62-7
CMF C2 H2 O4



RN 78367-17-6 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-3,4-dihydro-1-methyl-10-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

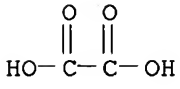
CM 1

CRN 78367-16-5
CMF C18 H15 Cl N2



CM 2

CRN 144-62-7
CMF C2 H2 O4

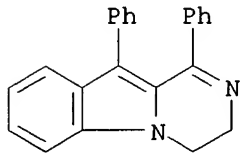


RN 78367-18-7 CAPLUS

CN Pyrazino[1,2-a]indole, 3,4-dihydro-1,10-diphenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

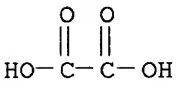
CM 1

CRN 54735-05-6
CMF C23 H18 N2



CM 2

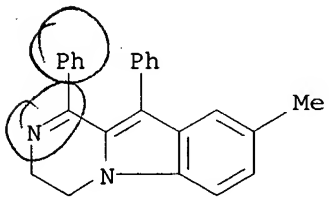
CRN 144-62-7
CMF C2 H2 O4



RN 78367-20-1 CAPLUS
CN Pyrazino[1,2-a]indole, 3,4-dihydro-8-methyl-1,10-diphenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

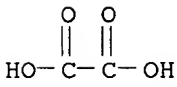
CM 1

CRN 78367-19-8
CMF C24 H20 N2



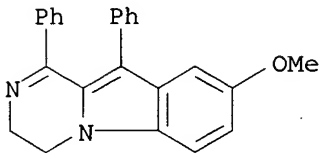
CM 2

CRN 144-62-7
CMF C2 H2 O4



RN 78367-21-2 CAPLUS

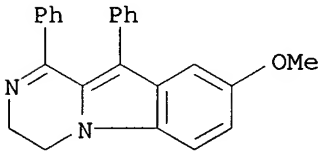
CN Pyrazino[1,2-a]indole, 3,4-dihydro-8-methoxy-1,10-diphenyl- (9CI) (CA INDEX NAME)



RN 78367-22-3 CAPLUS
CN Pyrazino[1,2-a]indole, 3,4-dihydro-8-methoxy-1,10-diphenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

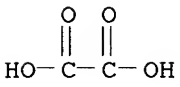
CM 1

CRN 78367-21-2
CMF C24 H20 N2 O

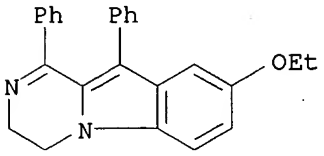


CM 2

CRN 144-62-7
CMF C2 H2 O4



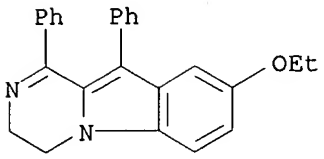
RN 78367-23-4 CAPLUS
CN Pyrazino[1,2-a]indole, 8-ethoxy-3,4-dihydro-1,10-diphenyl- (9CI) (CA INDEX NAME)



RN 78367-24-5 CAPLUS
CN Pyrazino[1,2-a]indole, 8-ethoxy-3,4-dihydro-1,10-diphenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

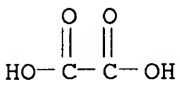
CM 1

CRN 78367-23-4
CMF C25 H22 N2 O



CM 2

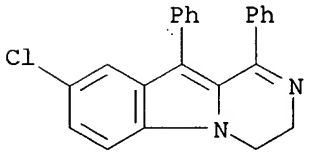
CRN 144-62-7
CMF C2 H2 O4



RN 78367-25-6 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-3,4-dihydro-1,10-diphenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

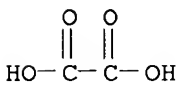
CM 1

CRN 54735-06-7
CMF C23 H17 Cl N2



CM 2

CRN 144-62-7
CMF C2 H2 O4



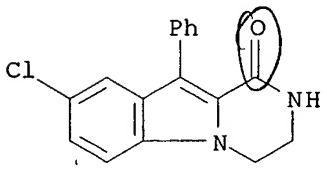
L4 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1977:468421 CAPLUS
DN 87:68421
TI 10-Aryl-1,2,3,4-tetrahydropyrazino[1,2-a]indole and derivatives
IN Freed, Meier E.
PA American Home Products Corp., USA
SO U.S., 7 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 4022778	A	19770510	US 1971-196178	19711105
PRAI US 1971-196178		19711105		

AB The pyrazinoindoles I [R = H, Me2N(CH2)3, ClCH2CO, Et2NCH2CO, Et2NCH2CH2, pyrrolidino; X = O, H2] were prepd. Thus, Et N-(2-benzoyl-4-chlorophenyl)glycinate was cyclized with EtONa and the Et 3-phenyl-5-chloro-2-indolecarboxylate treated with ClCH2CN followed by redn. and cyclization to give I (R = H, X = O), which was treated with Me2N(CH2)3Cl and reduced to give I [R = Me2N(CH2)3, X = H2]. At 127-400 mg/kg I were central nervous system depressants and anticonvulsants.

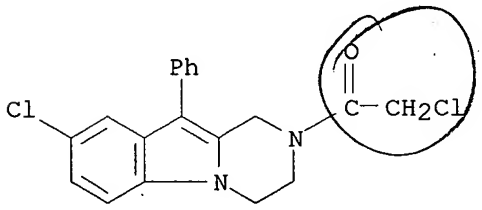
IT **25445-58-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and aminoalkylation of)

RN 25445-58-3 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-3,4-dihydro-10-phenyl- (8CI, 9CI) (CA INDEX NAME)



IT **63458-12-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction with diethylamine)

RN 63458-12-8 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-2-(chloroacetyl)-1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)

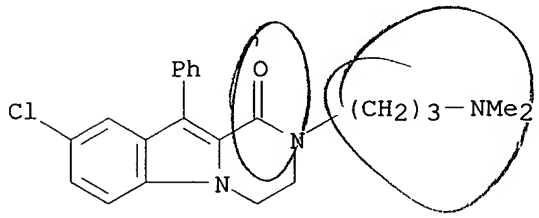


IT **63458-09-3P 63458-13-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and redn. of)

RN 63458-09-3 CAPLUS

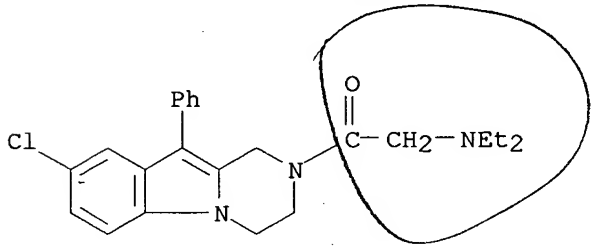
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-2-[3-(dimethylamino)propyl]-3,4-dihydro-10-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 63458-13-9 CAPLUS

CN Pyrazino[1,2-a]indole, 8-chloro-2-[(diethylamino)acetyl]-1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)



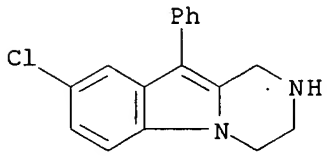
IT **39626-24-9P 63458-08-2P 63458-11-7P 63458-14-0P 63458-15-1P 63458-16-2P 63458-17-3P**

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

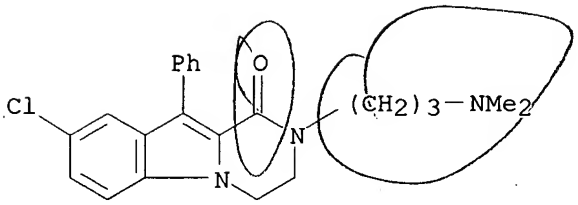
RN 39626-24-9 CAPLUS

CN Pyrazino[1,2-a]indole, 8-chloro-1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)



RN 63458-08-2 CAPLUS

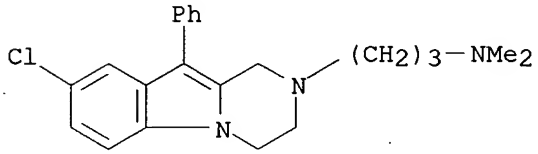
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-2-[3-(dimethylamino)propyl]-3,4-dihydro-10-phenyl- (9CI) (CA INDEX NAME)



RN 63458-11-7 CAPLUS
CN Pyrazino[1,2-a]indole-2(1H)-propanamine, 8-chloro-3,4-dihydro-N,N-dimethyl-10-phenyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

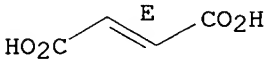
CRN 63458-10-6
CMF C22 H26 Cl N3



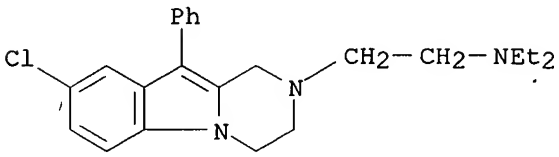
CM 2

CRN 110-17-8
CMF C4 H4 O4

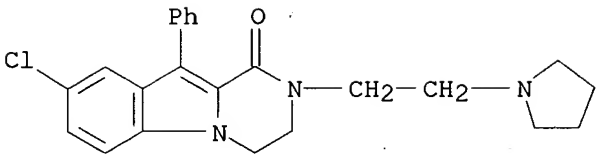
Double bond geometry as shown.



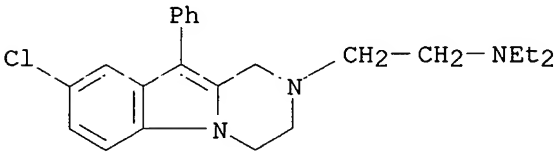
RN 63458-14-0 CAPLUS
CN Pyrazino[1,2-a]indole-2(1H)-ethanamine, 8-chloro-N,N-diethyl-3,4-dihydro-10-phenyl- (9CI) (CA INDEX NAME)



RN 63458-15-1 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-3,4-dihydro-10-phenyl-2-[2-(1-pyrrolidinyl)ethyl]- (9CI) (CA INDEX NAME)



RN 63458-16-2 CAPLUS
CN Pyrazino[1,2-a]indole-2(1H)-ethanamine, 8-chloro-N,N-diethyl-3,4-dihydro-10-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)

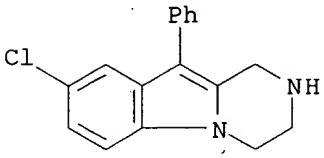


●2 HCl

RN 63458-17-3 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-1,2,3,4-tetrahydro-10-phenyl-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

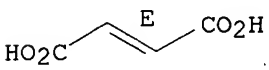
CRN 39626-24-9
CMF C17 H15 Cl N2



CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.

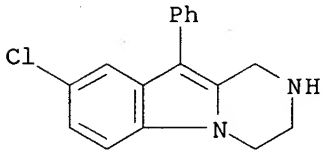


L4 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1975:497412 CAPLUS
DN 83:97412
TI 1,4-Benzodiazepine derivatives
IN Hellerbach, Joseph; Walser, Armin
PA Hoffmann-La Roche, F., und Co., A.-G., Switz.
SO Patentschrift (Switz.), 5 pp. Division of Swiss 560,201.
CODEN: SWXXAS
DT Patent
LA German
FAN.CNT 1

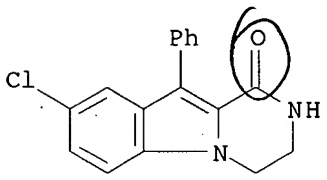
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CH 561702	A	19750515	CH 1974-16086	19690311
PRAI CH 1974-16086		19690311		

AB Cleavage of pyrazino[1,2-a]indole I gave 1-(2-benzoyl-4-chlorophenyl)piperazine-2,3-dione, which was cyclized to give benzodiazepine II (R = H), which was methylated to give II (R = Me). Et 5-chloro-3-phenylindole-2-carboxylate was treated with ClCH2CN to give Et 5-chloro-1-cyanomethyl-3-phenylindole-2-carboxylate, which was reduced to give 1-(2-aminoethyl)-5-chloro-3-phenylindole-2-methanol, which was cyclized to give I.

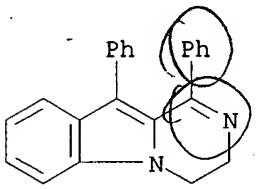
IT **39626-24-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cleavage of)
RN 39626-24-9 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)



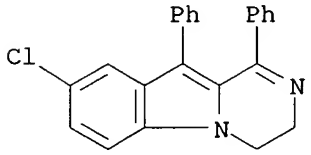
IT **25445-58-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cleavage of)
RN 25445-58-3 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-3,4-dihydro-10-phenyl- (8CI, 9CI) (CA INDEX NAME)



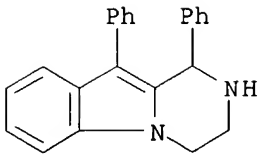
L4 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1975:140093 CAPLUS
DN 82:140093
TI Pyrazino[1,2-a]-[1,2-a]indoles. II. Synthesis of 1-substituted and 1,4-diazepino 10-phenyl-3,4-dihydropyrazino(1,2-a)indoles and 11-phenyl-4,5-dihydro-3H-1,4-diazepino(1,2-a)indoles
AU Gatta, F.; Zaccari, V.; Huidobro-Toro, J. P.; Chiavarelli, S.
CS Lab. Chim. Ter., Ist. Super Sanita, Rome, Italy
SO Farmaco, Edizione Scientifica (1975), 30(1), 58-69
CODEN: FRPSAX; ISSN: 0430-0920
DT Journal
LA Italian
AB The condensed indoles I (R = H, Cl; R1 = Me, Ph; n = 2, 3) were prepd. by treating the indoles II (R = H, Cl; R2 = R3 = H) with ClCH2CN or II (R = H, Cl; R2 = H; R3 = Bz) with CH2:CHCN, reducing and acylating II [R2 = (CH2)n-1CN] and cyclizing II [R2 = (CH2)nNHCOR3; R3 = Me, Ph] with POCl3 or polyphosphoric acid. Catalytic hydrogenation of I gave the 1,2-dihydro derivs. Both I and their 1,2-dihydro derivs. were sedatives, muscle relaxants, and antiadrenergics.
IT **54735-05-6P 54735-06-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and redn. of)
RN 54735-05-6 CAPLUS
CN Pyrazino[1,2-a]indole, 3,4-dihydro-1,10-diphenyl- (9CI) (CA INDEX NAME)



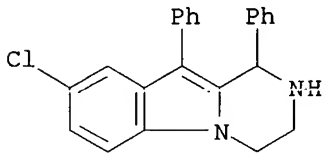
RN 54735-06-7 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-3,4-dihydro-1,10-diphenyl- (9CI) (CA INDEX NAME)



IT **54735-15-8P 54735-16-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 54735-15-8 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-1,10-diphenyl- (9CI) (CA INDEX NAME)



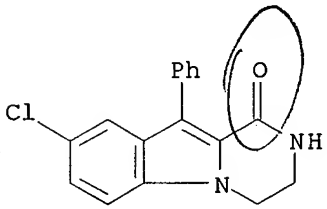
RN 54735-16-9 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-1,2,3,4-tetrahydro-1,10-diphenyl- (9CI) (CA INDEX NAME)



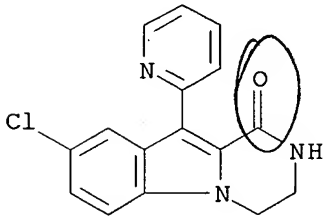
L4 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1974:463673 CAPLUS
DN 81:63673
TI Piperazinoindole derivatives
IN Yamamoto, Hisao; Inaba, Shigeo; Okamoto, Tadashi; Hirohashi, Toshiyuki; Ishizumi, Kikuo; Yamamoto, Michihiro; Maruyama, Isamu; Mori, Kazuo; Kobayashi, Tsuyoshi
PA Sumitomo Chemical Co., Ltd.
SO Jpn. Tokkyo Koho, 2 pp.
CODEN: JAXXAD
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 49004237	B4	19740131	JP 1970-10927	19700206
PRAI JP 1970-10927		19700206		

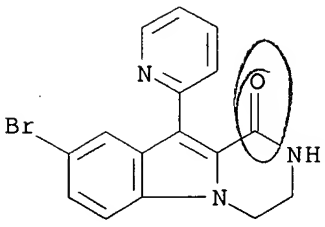
AB Piperazinoindoles I (R = Cl, Br, R1 = 2-pyridyl; R = Cl, R1 = Ph), useful as central depressants, were prepd. by cyclizing the corresponding indolecarboxylic acid esters (II, R2 = lower alkyl). E.g. 7 g II (R = Cl, R1 = 2-pyridyl, R2 = Et) in 100 ml EtOH was refluxed 30 min to give 5.5 g I (R = Cl, R1 = 2-pyridyl).
IT **25445-58-3P 29310-49-4P 29315-00-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 25445-58-3 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-3,4-dihydro-10-phenyl- (8CI, 9CI) (CA INDEX NAME)



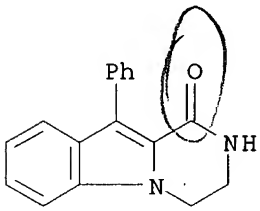
RN 29310-49-4 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-3,4-dihydro-10-(2-pyridinyl)- (9CI) (CA INDEX NAME)



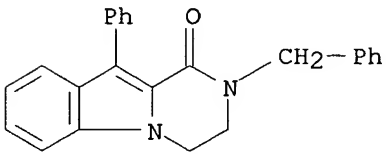
RN 29315-00-2 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-bromo-3,4-dihydro-10-(2-pyridinyl)- (9CI) (CA INDEX NAME)


N
O
Br
NH
N

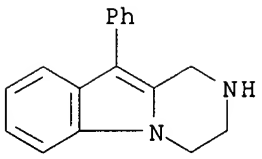
L4 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1974:425640 CAPLUS
DN 81:25640
TI Pyrazino[1,2-a]- and 1,4-diazapino[1,2-a]indoles. I. Synthesis of 10-phenyl-1,2,3,4-tetrahydropyrazino[1,2-a]indoles and 11-phenyl-2,3,4,5-tetrahydro-1H-1,4-diazepino[1,2-a]indoles
AU Gatta, F.; Zaccari, V.; Huidobro-Toro, J. P.; Landi-Vittory, R.
CS Lab. Chim. Ter., Ist. Super Sanita, Rome, Italy
SO Farmaco, Edizione Scientifica (1974), 29(5), 386-97
CODEN: FRPSAX; ISSN: 0430-0920
DT Journal
LA Italian
AB Indoles I (X = CH2, (CH2)2; X1 = O, H2; R = H, CH2Ph, Ph) were prepd. by treating the indole II (R1 = Cl) withRNH(CH2)n-OH (n = 2, 3) to give II (R1 = NR(CH2)nOH), which was treated with SOCl2 and the II (R1 = NR(CH2)nCl) cyclized with NaH to I (X = CH2, (CH2)2, X1 = O). Redn. gave I (X1 = H2). I (X = CO, CH2CO; X1 = H2, R = Ph) were prepd. similarly from II (R1NHPh) and BrCH2COBr or CH2:CHCN, resp. In rats i.p. I (X = (CH2)2, X1 = H2, R = Ph) had a sedative ED50 of 10 mg/kg, a muscle relaxant ED50 of 1 mg/kg, and an .alpha.-blocking activation time at 10 mg/kg of 10 min.
IT **52839-13-1P 52839-14-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and redn. of)
RN 52839-13-1 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 3,4-dihydro-10-phenyl- (9CI) (CA INDEX NAME)



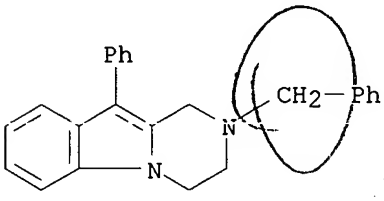
RN 52839-14-2 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 3,4-dihydro-10-phenyl-2-(phenylmethyl)- (9CI) (CA INDEX NAME)



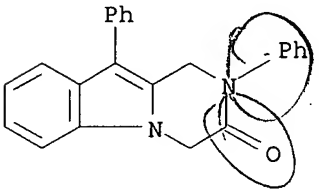
IT **52839-15-3P 52839-16-4P 52839-32-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 52839-15-3 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)



RN 52839-16-4 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-10-phenyl-2-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 52839-32-4 CAPLUS
CN Pyrazino[1,2-a]indol-3(4H)-one, 1,2-dihydro-2,10-diphenyl- (9CI) (CA INDEX NAME)

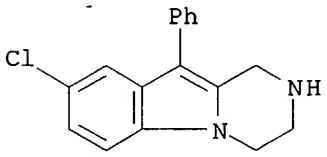


L4 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1974:108577 CAPLUS
DN 80:108577
TI Piperazinoindole derivatives
IN Yamamoto, Hisao; Okamoto, Tadashi; Kobayashi, Tsuyoshi
PA Sumitomo Chemical Co., Ltd.
SO Jpn. Tokkyo Koho, 3 pp.
CODEN: JAXXAD
DT Patent
LA Japanese
FAN.CNT 1

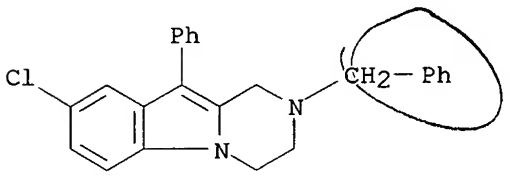
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 48030080	B4	19730917	JP 1968-70340	19680927
PRAI JP 1968-70340		19680927		

AB Title nervous system depressants (I, R1 = lower alkyl, aralkyl, aryl, R = H, halogen, lower alkoxy) were prepd. by treating I (R1 = H) with an alc. or alkyl halide. Thus, 2.8 g I (R = 7-Cl, R1 = H) was treated with NaH followed by PhCH2Br in DMF to give 2.8 g I (R = 7-Cl, R1 = PhCH2).

IT **39626-24-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(benzylation of)
RN 39626-24-9 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)



IT **52534-54-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 52534-54-0 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-1,2,3,4-tetrahydro-10-phenyl-2-(phenylmethyl)- (9CI) (CA INDEX NAME)



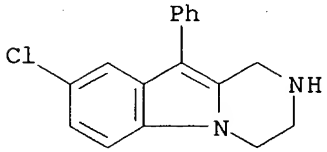
L4 ANSWER 16 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1973:29813 CAPLUS
DN 78:29813
TI Piperazinoindole derivatives
IN Okamoto, Tadashi; Arasaki, Seitetsu; Kobayashi, Tsuyoshi; Izumi, Takuhiro; Yamamoto, Hisao
PA Sumitomo Chemical Co., Ltd.
SO Jpn. Tokkyo Koho, 3 pp.
CODEN: JAXXAD
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 47041359	B4	19721019	JP 1968-23507	19680408

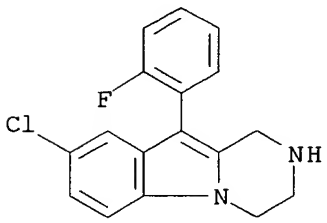
AB A suspension of 1-cyanomethyl-2-carboethoxy-3-phenyl-5-chloroindole (4.95 g) in Et2O was added dropwise to Et2O contg. LiAlH4 at room temp. and the mixt. refluxed 2 hr to give 4.2 g 7-chloro-9-phenylpiperazino[1,2-a]indole (I). Similarly prepd. was 9-(o-fluorophenyl) deriv. with central nervous system depressant activity.

IT **39626-24-9P 39626-25-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

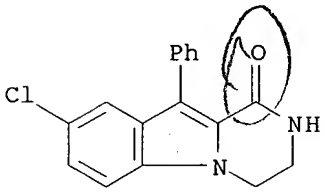
RN 39626-24-9 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-1,2,3,4-tetrahydro-10-phenyl- (9CI) (CA INDEX NAME)



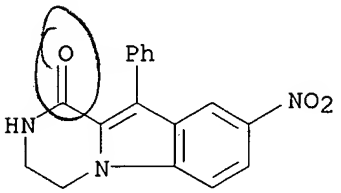
RN 39626-25-0 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-10-(2-fluorophenyl)-1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)



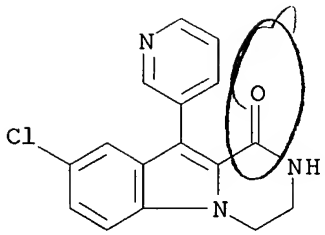
L4 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1972:526356 CAPLUS
DN 77:126356
TI Benzodiazepines. VII. Pyrazino[1,2-a]indol-1(2H)-ones and their conversion to 2,3-dihydro-1H-1,4-benzodiazepines
AU Inaba, Shigeho; Ishizumi, Kikuo; Okamoto, Tadashi; Yamamoto, Hisao
CS Pharm. Div., Sumitomo Chem. Co., Ltd., Takarazuka, Japan
SO Chemical & Pharmaceutical Bulletin (1972), 20(8), 1628-36
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
AB A new synthetic route for the prepn. of 2,3-dihydro-1H-1,4-benzodiazepines (I, R = Ph or 2-pyridyl; R1 = H; X = Br, Cl, NO2) is described. It consists of cyanomethylation of Et indole-2-carboxylates, redn. of the cyano group, oxidn. of the 1-aminoethylindole derivs. III, and finally hydrolysis of the resulting 2,3-piperazinediones (IV). In an alternative synthesis of the key intermediate III (R = Ph, X = Cl) (V), intramol. alkylation of N-(2-chloroethyl)indole-2-carboxamide gave a mixt. of V and 5-chloro-3-phenyl-2-(2-oxazolin-2-yl)indole.
IT **25445-58-3P 36975-43-6P 37657-54-8P 37747-39-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 25445-58-3 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-3,4-dihydro-10-phenyl- (8CI, 9CI) (CA INDEX NAME)



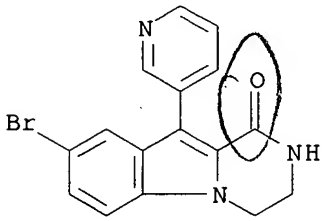
RN 36975-43-6 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 3,4-dihydro-8-nitro-10-phenyl- (9CI) (CA INDEX NAME)



RN 37657-54-8 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-3,4-dihydro-10-(3-pyridinyl)- (9CI) (CA INDEX NAME)



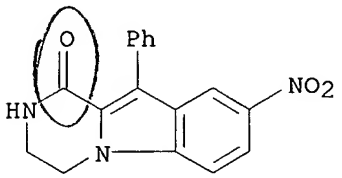
RN 37747-39-0 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-bromo-3,4-dihydro-10-(3-pyridinyl)-(9CI) (CA INDEX NAME)



L4 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1972:448532 CAPLUS
DN 77:48532
TI 5-Phenyl-7-nitro-2,3-dihydro-1H-1,4-benzodiazepine
IN Yamamoto, Hisao; Inaba, Shigeho; Okamoto, Tadashi; Hirohashi, Toshiyuki; Ishizumi, Kikuo; Yamamoto, Michihiro; Maruyama, Isamu; Mori, Kazuo; Kobayashi, Tsuyoshi; et al.
PA Sumitomo Chemical Co., Ltd.
SO Ger. Offen., 24 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2144272	A	19720323	DE 1971-2144272	19710903
PRAI DE 1971-2144272		19710903		

AB The title compd. (I) was prepd. in 5 steps from Et 5-nitro-3-phenylindole-2-carboxylate (II) by successive treatment with ClCH2CN, NaBH4-BF3.OEt2, and Na2CO3 to give oxopiperazinoindole (III), oxidn. with CrO3-HOAc, and cyclization with NaOH-EtOH. III was also prepd. from II by condensation with H2NCH2CH2OH, chlorination with SOCl2, and cyclization with K2CO3.
IT **36975-43-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 36975-43-6 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 3,4-dihydro-8-nitro-10-phenyl- (9CI) (CA INDEX NAME)

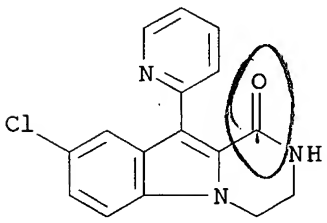


L4 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1972:140909 CAPLUS
DN 76:140909
TI 2-[2-(2,3-Dioxo-1-piperazinyl)-5-halobenzoyl]pyridines and 5-(2-pyridyl)-7-halo-2,3-dihydro-1H-1,4-benzodiazepins
IN Yamamoto, Hisao; Inaba, Shigeho; Okamoto, Tadashi; Hirohashi, Toshiyuki; Ishizumi, Kikuo; Maruyama, Isamu; Yamamoto, Michihiro
PA Sumitomo Chemical Co., Ltd.
SO Ger. Offen., 25 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

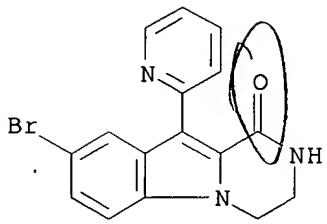
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2017857	A	19720120	DE 1970-2017857	19700414
AT 299964	B	19720710	AT 1971-6711	19700212
PRAI JP 1969-28910		19690414		

AB The benzoylpyridines (I, R = Br or Cl) were prepd. by 4-step reactions and converted into the benzodiazepines (II, R = Br or Cl). Thus, reaction of Et (2-pyridyl)pyruvate and p-ClC6H4NHNH2.HCl gave 2-ethoxycarbonyl-3-(2-pyridyl)-5-chloroindole (III). Treatment of 10.2 g III in DMF with 1.65 g 50% NaH at 20.degree., and addn. of 2.6 g ClCH2CN gave 7.4 g 1-cyanomethyl-2-ethoxycarbonyl-3-(2-pyridyl)-5-chloroindole (IV). Hydrogenation of IV in THF at 20.degree. over Raney Ni gave V (R = Cl). A soln. of 1 g V (R = Cl) in HOAc was oxidized with O contg. 2% O3 to give 2.5 g I (R = Cl). Similarly prepd. was I (R = Br). Sapon. of I (R = Cl) with NaOH in aq. EtOH gave II (R = Cl). Similarly prepd. was II (R = Br).

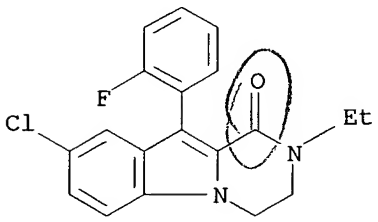
IT **29310-49-4P 29315-00-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 29310-49-4 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-3,4-dihydro-10-(2-pyridinyl)-(9CI) (CA INDEX NAME)



RN 29315-00-2 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-bromo-3,4-dihydro-10-(2-pyridinyl)-(9CI) (CA INDEX NAME)


N
O
Br
NH
N

L4 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1971:405867 CAPLUS
DN 75:5867
TI Benzodiazepines. IV. New synthesis of 1-diethylaminoethyl-substituted 1,4-benzodiazepin-2-ones
AU Inaba, Shigeho; Ishizumi, Kikuo; Yamamoto, Hisao
CS Pharm. Div., Sumitomo Chem. Co., Ltd., Kobe, Japan
SO Chemical & Pharmaceutical Bulletin (1971), 19(2), 263-72
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
AB 1-(2-Diethylaminoethyl)-substituted 1,4-benzodiazepin-2-ones and related compds. were prepd. by ring enlargement of the corresponding 2-aminomethylindole derivs. Attempted chlorination of 5-chloro-1-(2-diethylaminoethyl)-3-(o-fluorophenyl)indole-2-carboxylic acid (I, R = Et2N(CH2)2, X = F) with SOCl2 yielded 8-chloro-3,4-dihydro-2-ethyl-10-(o-fluorophenyl)-pyrazino [1,2-a] indol-1(2H)-one (II, X = F). Chlorination of 5-chloro-3-phenylindole-2-carboxylic acid deriv. (I, R = H, X = F, Cl) with SOCl2 gave the acid chloride and the dimer.
IT **32502-38-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 32502-38-8 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-2-ethyl-10-(o-fluorophenyl)-3,4-dihydro- (8CI) (CA INDEX NAME)

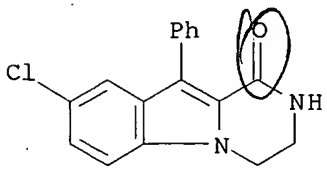


L4 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1971:88075 CAPLUS
DN 74:88075
TI Piperazinoindole intermediates
IN Yamamoto, Hisao; Inaba, Shigeho; Okamoto, Tadashi; Horohashi, Toshiyuki; Ishizumi, Kikuo; Yamamoto, Michihiro; Maruyama, Isamu; Mori, Kazuo; Kobayashi, Tsuyoshi; Izumi, Takahiro
PA Sumitomo Chemical Co., Ltd.
SO Ger. Offen., 15 pp. Addn. to Ger. Offen. 1,906,254
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1965981	A	19710121	DE 1969-1965981	19690207
	JP 48026752	B4	19730815	JP 1968-33260	19680517
	US 3702321	A	19721107	US 1969-797708	19690207
	GB 1246715	A	19710915	GB 1969-7121	19690210
	GB 1246717	A	19710915	GB 1970-49088	19690210
	NL 6902224	A	19690815	NL 1969-2224	19690212
	SE 344590	B	19720424	SE 1969-1939	19690212
	CH 520698	A	19720331	CH 1971-6844	19690505
PRAI	JP 1968-22530	A	19680404		
	JP 1968-8951	A	19680213		
	JP 1968-21887	A	19680402		
	JP 1968-31466	A	19680510		
	JP 1968-33260	A	19680517		
	JP 1968-36249	A	19680527		
	JP 1968-41106	A	19680613		

AB The title compds. (I) were prepd. by catalytic hydrogenation of II (R = CH2CN), obtained by condensing II (R = H) and ClCH2CN in the presence of bases, e.g. NaH, and oxidized via III to give on base treatment benzo-diazepines (IV) used as tranquilizers, hypnotics, muscle relaxants, and spasmolytics. Thus, a catalyst obtained by 1 hr NaOH treatment at 100.degree. of 50 Raney Ni was added to II (R = CH2CN, X = 5-Cl, Y = H) in THF and the mixt. treated 12 hr with H at 18.degree. to give I (X = 7-Cl, Y = H) (Ia). Ia was oxidized 16 hr with CrO3-HOAc-H2O at 10.degree. to give III (X = 5-Cl, Y = H), which was refluxed 3 hr with NaOH-EtOH-H2O and further 17 hr after H2O addn. to give IV (X = 7-Cl, Y = H), obtained also by similarly refluxing 4,2-ClBzC6H3NHCH2CH2NHCOCO2H. Sim-ilarly prepd. were IV (X and Y given): H, H; 7-Br, H; 7-Cl, o-Cl; 7-Cl, o-F; and 7-CF3, H.

IT **25445-58-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 25445-58-3 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-3,4-dihydro-10-phenyl- (8CI, 9CI) (CA INDEX NAME)

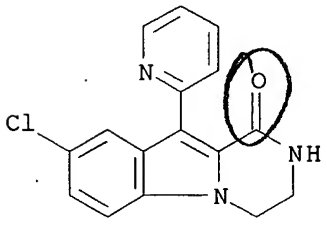


L4 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1970:531048 CAPLUS
DN 73:131048
TI Benzodiazepines
IN Yamamoto, Hisao; Inaba, Shigeho; Okamoto, Tadashi; Hirohashi, Toshiyuki; Ishizumi, Kikuo; Maruyama, Isamu; Kobayashi, Tsuyoshi; Yamamoto, Michihiro; Mori, Kazuo
PA Sumitomo Chemical Co., Ltd.
SO Ger. Offen., 29 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

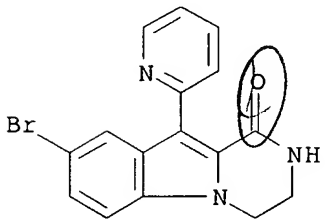
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2005845	A	19700903	DE 1970-2005845	19700209
	JP 49010679	B4	19740312	JP 1969-19324	19690313
	GB 1286701	A	19720823	GB 1970-1286701	19700210
	BE 745809	A	19700716	BE 1970-745809	19700211
	NL 7001926	A	19700814	NL 1970-1926	19700211
	FR 2034541	A1	19701211	FR 1970-4835	19700211
	FR 2034541	A5	19701211		
	AT 299955	B	19720710	AT 1970-1297	19700212
	CH 542861	A	19731130	CH 1970-2049	19700212
PRAI	JP 1969-10672		19690212		
	JP 1969-19324		19690313		
	JP 1969-19325		19690313		
	JP 1969-25800		19690402		
	JP 1969-28910		19690414		

AB Et 2-pyridylpyruvate, p-ClC6H4NHNH2.HCl, AcOH, and H2SO4 was refluxed 1 hr to give I, (R = Cl, R1 = H) (II), m. 155-5.5.degree. (EtOH); II.HCl m. 237-8.degree. (EtOH). II and NaH in DMF was stirred with ClCH2CN 1 hr to give I (R = Cl, R1 = CH2CN) (III), m. 154-6.degree. (petroleum ether-EtOH). III in THF was hydrogenated over Raney Ni until 2 moles H was absorbed to give IV (R = Cl) (V), m. 280-2.5.degree. (EtOH). V in AcOH was treated with O3 or CrO3 to give VI (R = Cl) (VII), m. 121-3.degree. (iso-PrOH). VII and NaOH-aq. EtOH was refluxed 20 hr to give VIII (R = Cl), m. 187-8.degree. (EtOH). Similarly prepd. were 10 other compds. VIII are tranquilizers, antispasmodics, hypnotic and muscle-relaxing agents, and intermediates in the synthesis of other pharmaceuticals.

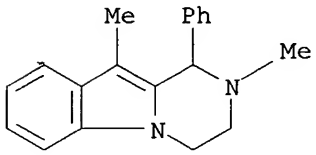
IT **29310-49-4P 29315-00-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 29310-49-4 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-3,4-dihydro-10-(2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 29315-00-2 CAPLUS
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-bromo-3,4-dihydro-10-(2-pyridinyl)-(9CI) (CA INDEX NAME)



L4 ANSWER 23 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1970:456063 CAPLUS
DN 73:56063
TI Alkylation and dehydrogenation of piperazino[1,2-a]indole derivatives
AU Shvedov, V. I.; Altukhova, L. B.; Alekseev, V. V.; Grinev, A. N.
CS Vses. Nauch.-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR
SO Khimiya Geterotsiklicheskikh Soedinenii (1970), (5), 714-15
CODEN: KGSSAQ; ISSN: 0132-6244
DT Journal
LA Russian
AB Piperazino[1,2-a]indoles (I) (R:)H) were N-alkylated by alcs. with stirring at 55-60.degree. 4-6 hr in the presence of Raney Ni catalyst to give 92% I (R = Me), m. 135-6.degree.; 91% I (R = Et), m. 105-6.degree.. Similarly prepd. was 87% II, m. 113-14.degree.. In refluxing EtOH or BuOH, dehydrogenation and alkylation of I (R:H) took place to give 91% III (R = H, R1 = Et), m. 109-10.degree.. Similarly prepd. was 93.5% III (R = Me, R1 = Bu), m. 160-1.degree..
IT **27853-14-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 27853-14-1 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-2,10-dimethyl-1-phenyl- (8CI) (CA INDEX NAME)



L4 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1970:21723 CAPLUS
DN 72:21723
TI Therapeutic 5-phenyl-2,3-dihydro-1H-1,4-benzodiazepines
IN Inaba, Shigeho; Yamamoto, Michihiro; Izumi, Takahiro; Ishizumi, Kikuo; Maruyama, Isamu; Kobayashi, Tsuyoshi; Hirohashi, Toshiyuki; Mori, Kazuo; Yamamoto, Hisao; Okamoto, Tadashi
PA Sumitomo Chemical Co., Ltd.
SO Ger. Offen., 23 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1906254	A	19690918	DE 1969-1906254	19690207
	DE 1906254	B2	19770526		
	JP 48026752	B4	19730815	JP 1968-33260	19680517
	US 3702321	A	19721107	US 1969-797708	19690207
	GB 1246715	A	19710915	GB 1969-7121	19690210
	NL 6902224	A	19690815	NL 1969-2224	19690212
	AT 296312	B	19720210	AT 1969-1429	19690212
	SE 344590	B	19720424	SE 1969-1939	19690212
PRAI	JP 1968-31466	A	19680510		
	JP 1968-8951	A	19680213		
	JP 1968-21887	A	19680402		
	JP 1968-22530	A	19680404		
	JP 1968-33260	A	19680517		
	JP 1968-36249	A	19680527		
	JP 1968-41106	A	19680613		

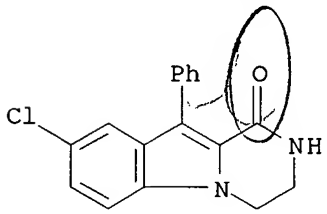
AB The title compds. (I) tranquilizers, hypnotics, muscle relaxants, and spasmolytics are prepd. Thus, a mixt. of 1.1 g 50% NaH in 10 ml HCONMe2 (DMF), and 6 g II (X = Cl, Y = H) in 30 ml DMF is stirred 15 min at 30.degree., a soln. of 1.7 g ClCH2CN is 10 ml DMF added dropwise, and the mixt. stirred at 25-30.degree. to give 5.5 g III (X = Cl, Y = H) (IIIa), m. 126.5-27.degree. (benzene-hexane). A soln. of 10 g IIIa in 100 ml tetrahydrofuran (THF) is hydrogenated 12 hr at atm. pressure and 18.degree. in the presence of a catalyst (made by treating 50% Raney Ni alloy with aq. NaOH 1 hr at 100.degree.), the latter filtered off, THF distd. off in vacuo, the residue dissolved in hot EtOH, the soln. kept 15 hr in the cold to give 3.6 g. IV (X = Cl, Y = H) (IVa), m. 244.5-45.degree. (EtOH-benzene). A mixt. of 1.6 g. IVa and 35 ml HOAc is mixed at 10.degree. with 1.6 g CrO3 in 2 ml H2O, stirred 16 hr at 20.degree., poured into 500 ml H2O, the pH adjusted to 7-8 (NH3), and the mixt. extd. with CHCl3 to give 1.5 g V (X = Cl, Y = H) (Va), m. 198.degree. (aq. EtOH). A mixt. of 3.3 g Va and a soln. of 2 g NaOH in 5 ml H2O with 50 ml EtOH is refluxed 3 hr, 50 ml H2O added, refluxed 17 hr, most of the EtOH distd. off, 200 ml H2O added to the residue, and the latter heated to 80.degree. to yield 2 g I (X = Cl, Y = H) (Ia), m. 173.degree. (EtOH). Ia is also prepd. by refluxing 16 hr a mixt. of either (i) 3 g VI (X = Cl, Y = H) (VIa) with a soln. of 1 g NaOH in 30 ml EtOH + 10 ml H2O, or (ii) 2 g VII (X = Cl, Y = H) (VIIa) with a soln. of 0.5 g NaOH in 30 ml EtOH + 5 ml H2O, and in either case distg. off EtOH in vacuo, adding 200 (or 100) ml H2O and recovering 2.2 (or 1.6) g. Ia. Similarly obtained are the following I where (X, Y, and m.p. given): H, H, 144-6.degree. (petroleum ether); Br, H, 173-5.degree.; Cl, Cl, 175-7.degree.; Cl, F, 161-3.degree.; CF3, H (Ib), 110-11.degree.. Methanolic HCl is added to a methanolic soln. of Ib, the mixt. kept 1 h r

at room temp., MeOH removed in vacuo, and the residue washed (benzene) to give Ib-HCl, m. 283-5.degree. (MeOH-Et2O). A mixt. of 1.3 g Va and a soln. of 500 mg NaOH in 30 ml EtOH + 2 ml H2O is refluxed 50 min, solvent distd. in vacuo, 100 ml H2O added to the residue, the latter filtered, the filtrate adjusted to pH 1 (concd. HCl) and the ppt. filtered off and washed (H2O), to give VIa, m. 191.degree. (decompn.) (EtOH). A mixt. of 1 g VIa and 20 ml tetrahydronaphthalene is refluxed 30 min, cooled, 200 ml benzene added, the soln. washed (aq. Na2CO3, H2O), dried (Na2SO4), concd. in vacuo, the residue kept 15 hr in the cold with 100 ml hexane to give VIIa, m. 130-40.degree. (benzene).

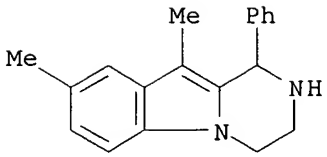
IT **25445-58-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 25445-58-3 CAPLUS

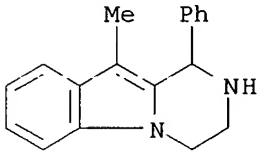
CN Pyrazino[1,2-a]indol-1(2H)-one, 8-chloro-3,4-dihydro-10-phenyl- (8CI, 9CI) (CA INDEX NAME)



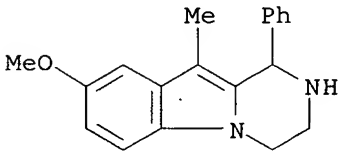
L4 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1969:87750 CAPLUS
DN 70:87750
TI Synthesis of pyrazino(1,2-a)indoles
AU Shvedov, V. I.; Alekseev, V. V.; Altukhova, L. B.; Grinev, A. N.
CS Vses. Nauch.-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR
SO Khimiko-Farmatsevticheskii Zhurnal (1968), 2(12), 3-7
CODEN: KHFZAN; ISSN: 0023-1134
DT Journal
LA Russian
AB The title compds. (I) were prepd. as follows: to a suspension of 0.1 mole deriv. of 2-aroyl-3-methylindole (II) in 60 ml. abs. dioxane was added an alc. soln. of 0.1 g.-atom Na, the solvents distd. and to the residue was added with stirring a soln. of 0.1 mole BrCH2CH(OBu)2 in 100 ml. dry HCONMe2. The mixt. was refluxed 1 hr., cooled, poured into H2O, extd. with C6H6, the ext. was dried by azeotropic distn. and the solvent distd. in vacuo. The residue was dissolved in 300 ml. AcOH, 0.3 mole AcONH4 was added, the mixt. refluxed 1 hr., the AcOH distd. in vacuo, the residue poured into H2O and alkalized to give the following I (R, R1, % yield, and m.p. given): H, H, 63, 132-3.degree.; Me, H, 65, 140-1.degree.; H, Me, 61.5, 145-6.degree.; H, MeO, 55, 150-1.degree.; MeO, H, 74, 256-7.degree. (decompn.); Cl, Cl, 68, 203-4.degree.; Me, MeO, 51.2, 162-3.degree.. To a boiling soln. of 0.02 mole I in 200 ml. abs. alc. was added every 5-10 min. Na to a total of 20.7 g., the mixt. was refluxed with stirring 15-20 min., dild. (H2O), the alc. distd. in vacuo, the residue sepd. and dried to give the following III (R, R1, % yield, and m.p. given): H, H, 98.4, 135-6.degree.; Me, H, 93, 115-16.degree.; MeO, H, 94, 145-6.degree.. To a suspension of 2.5 g. 2-p-toluoyl-3-methylindole in 10 ml. abs. dioxane was added an alc. soln. of 0.23 g. Na, the solvents distd. in a Wood's alloy bath at 120.degree. and then in vacuo. To the residue was added 1.5 g. Cl(CH2)2NEt2 and 1 ml. HCONMe2, the mixt. heated 1 hr. at 130-40.degree., treated with H2O, extd. with C6H6 and worked up to yield 73% 1-[.beta.-(diethylamino)ethyl]-2-p-toluoyl-3-methylindole-HCl), m. 223-4.degree. (dioxane). Similarly, from 7.89 g. 2-p-toluoyl-3,5-dimethylindole, 15 ml. abs. dioxane, 0.69 g. Na and 3.8 g. .gamma.-(dimethylamino)propyl chloride resulted 83.5% 1-[.gamma.-(dimethylamino)-propyl]-2-p-toluoyl-3,5-dimethylindole-HCl, m. 126-7.degree. (C6H6-petroleum ether). To a soln. of 0.01 mole II in 10 ml. abs. dioxane was added 0.011 mole CH2(NEt2)2, the soln. heated 2.5 hrs. on a water bath, distd. in vacuo and worked up to give the following IV (R, R1, % yield and m.p. given): Me, H, 70, 73-4.degree.; H, MeO, 85.2, 90-90.5.degree.; Me, Me, 87, 76-7.degree..
IT **21689-24-7P 21689-25-8P 21689-26-9P**
21942-95-0P 21942-96-1P 21942-97-2P
21942-98-3P 21942-99-4P 21943-00-0P
21943-01-1P 21943-02-2P 21943-03-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 21689-24-7 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-8,10-dimethyl-1-phenyl- (8CI) (CA INDEX NAME)



RN 21689-25-8 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-10-methyl-1-phenyl- (8CI) (CA INDEX NAME)



RN 21689-26-9 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-8-methoxy-10-methyl-1-phenyl- (8CI) (CA INDEX NAME)



RN 21942-95-0 CAPLUS
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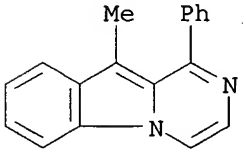
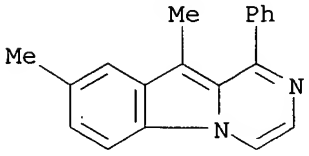
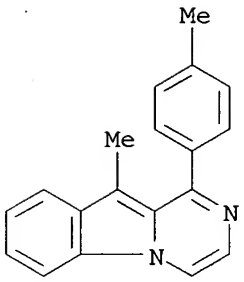


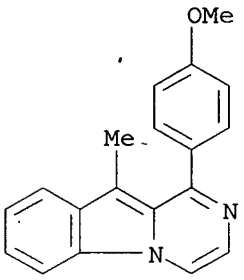
RN 21942-96-1 CAPLUS
CN Pyrazino[1,2-a]indole, 8,10-dimethyl-1-phenyl- (8CI) (CA INDEX NAME)



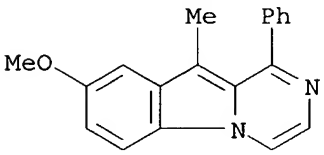
RN 21942-97-2 CAPLUS
CN Pyrazino[1,2-a]indole, 10-methyl-1-p-tolyl- (8CI) (CA INDEX NAME)



RN 21942-98-3 CAPLUS
CN Pyrazino[1,2-a]indole, 1-(p-methoxyphenyl)-10-methyl- (8CI) (CA INDEX NAME)

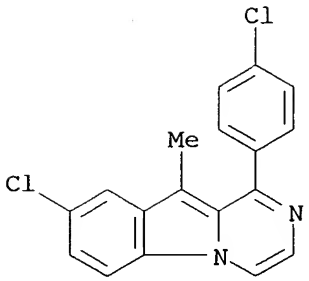


RN 21942-99-4 CAPLUS
CN Pyrazino[1,2-a]indole, 8-methoxy-10-methyl-1-phenyl-, monohydrochloride (8CI) (CA INDEX NAME)



● HCl

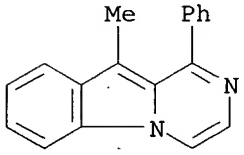
RN 21943-00-0 CAPLUS
CN Pyrazino[1,2-a]indole, 8-chloro-1-(p-chlorophenyl)-10-methyl- (8CI) (CA INDEX NAME)



RN 21943-01-1 CAPLUS
CN Pyrazino[1,2-a]indolium, 2,10(or 5,10)-dimethyl-1-phenyl-, iodide (8CI) (CA INDEX NAME)

CM 1

CRN 21942-95-0
CMF C18 H14 N2



CM 2

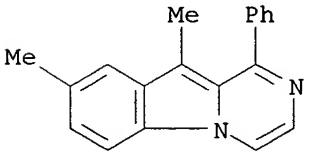
CRN 74-88-4
CMF C H3 I

H_3C-I

RN 21943-02-2 CAPLUS
CN Pyrazino[1,2-a]indolium, 2,8,10(or 5,8,10)-trimethyl-1-phenyl-, iodide (8CI) (CA INDEX NAME)

CM 1

CRN 21942-96-1
CMF C19 H16 N2



CM 2

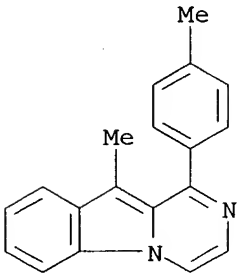
CRN 74-88-4
CMF C H3 I

H_3C-I

RN 21943-03-3 CAPLUS
CN Pyrazino[1,2-a]indolium, 2,10(or 5,10)-dimethyl-1-p-tolyl-, iodide (8CI) (CA INDEX NAME)

CM 1

CRN 21942-97-2
CMF C19 H16 N2



CM 2

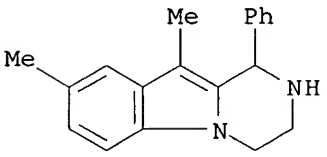
CRN 74-88-4
CMF C H3 I

H_3C-I

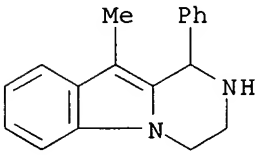
L4 ANSWER 26 OF 26 CAPLUS COPYRIGHT 2003 ACS
AN 1969:57834 CAPLUS
DN 70:57834
TI 1-Aryl-10-alkyl-1,2,3,4-tetrahydropyrazino[1,2-a]indoles
IN Shvedov, V. I.; Altukhova, L. B.; Grinev, A. N.; Alekseev, V. V.
PA Ordzhonikidze, S., All-Union Scientific-Research Chemical-Pharmaceutical Institute
SO U.S.S.R.
From: Izobret., Prom. Obraztsy, Tovarnye Znaki 1968, 45(29), 23.
CODEN: URXXAF
DT Patent
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 226619		19680916	SU	19670728

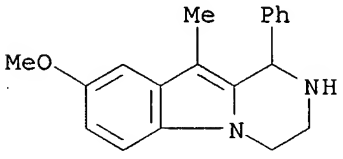
AB The title compds. are prepd. by subjecting 1-aryl-10-alkylpyrazino[1,2-a]indoles or their hydrochlorides to redn. with Na in EtOH at the b.p. of the reaction mixt.
IT **21689-24-7P 21689-25-8P 21689-26-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 21689-24-7 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-8,10-dimethyl-1-phenyl- (8CI) (CA INDEX NAME)



RN 21689-25-8 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-10-methyl-1-phenyl- (8CI) (CA INDEX NAME)



RN 21689-26-9 CAPLUS
CN Pyrazino[1,2-a]indole, 1,2,3,4-tetrahydro-8-methoxy-10-methyl-1-phenyl- (8CI) (CA INDEX NAME)



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     FILE 'REGISTRY' ENTERED AT 17:45:47 ON 01 MAY 2003
L1              STRUCTURE UPLOADED
L2            1 S L1 SSS SAM
L3          102 S L1 SSS FUL

     FILE 'CAPLUS' ENTERED AT 17:46:59 ON 01 MAY 2003
L4           26 S L3

     FILE 'CAOLD' ENTERED AT 17:47:53 ON 01 MAY 2003

=> s l3
L5            0 L3

=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                    0.40     267.93

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                    0.00     -16.93

STN INTERNATIONAL LOGOFF AT 17:48:06 ON 01 MAY 2003
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